Landmarc Environmental Systems, LLC

October 13, 2017
Project No. 6006-300-30-17-07

Skip Schupp
Gas Operations Manager
17955 Holiday Drive,
Shawnee, KS 66217

Re: Cottonwood Landfill 3rd Quarter
Surface Emission Monitoring

Dear Schupp:

In accordance with §60.756(f), In accordance with 40 CFR60.755(c) the third quarter surface emission monitoring (SEM) event was conducted on September 7, 2017 at the Cottonwood Landfill in Marissa, Illinois.

During the monitoring event, there were no instances of methane monitored in excess of 500 ppm by volume above background. Enclosed are the field data sheets and the SEM path during the sampling event.

Thank you for the opportunity to conduct the monitoring. If you should have any questions or would like to discuss these results, please do not hesitate to call me at 816-728-2972.

Very truly yours,
Landmarc Environmental Systems, LLC

Rick Nuessen
Project Manager

Enclosures:

Field Data Sheets
SEM Path Map

Surface Emissions Monitoring

Conducted per 40 CFR 60.753

Reading Description: Initial _____ 10-Day _____ 30-Day

SEM Calibration Log

DATE: 9/7/2017

SITE: **Cottonwood Landfill**

TECHNICIAN: Jenny Holt-Weaver Consultants Group

S/N: 15868660

MAKE/MODEL: TVA 100

CALIBRATION GAS STANDARD (ppm) 500 ppm

CALIBRATION GAS: LOT#: EAP-150A-500-2 EXP. DATE: 6/24/2019

MEASUREMENT No. 1

Meter Reading for Zero Air	0.1	PPM
Meter Reading for Calibration Gas	499	PPM

MEASUREMENT No. 2

Meter Reading for Zero Air	0.66	PPM
Meter Reading for Calibration Gas	500	PPM

MEASUREMENT No. 3

Meter Reading for Zero Air	0.27	PPM
Meter Reading for Calibration Gas	497	PPM

Calibration Precession : $\frac{[STD\text{-}1] + [STD\text{-}2] + [STD\text{-}3]}{3} \times \frac{1}{500} \times 100$ = 0.8 %

percent error must be less then 10

Jenny Holt-

Surface Emissions Monitoring

Conducted per 40 CFR 60.753

Reading Description: Initial _____ 10-Day _____ 30-Day

SEM Instrument Response Time

DATE:	9/7/2017
SITE:	**Cottonwood**
TECHNICIAN:	Jenny Holt-Weaver Consultants Group
S/N:	15868660
MAKE/MODEL:	TVA 1000

MEASUREMENT No. 1

Stabilized Reading Using Calibration Gas:	497	PPM
90% of the Stabilized reading:	447	PPM
Time to Reach 90% of Stabilized reading after switching from Zero air to Calibration Gas	7	seconds

MEASUREMENT No. 2

Stabilized Reading Using Calibration Gas:	499	PPM
90% of the Stabilized reading:	449	PPM
Time to Reach 90% of Stabilized reading after switching from Zero air to Calibration Gas	4	seconds

MEASUREMENT No. 3

Stabilized Reading Using Calibration Gas:	498	PPM
90% of the Stabilized reading:	448	PPM
Time to Reach 90% of Stabilized reading after switching from Zero air to Calibration Gas	4	seconds

Average Response Time 5 (must be less then 30 seconds)

Jenny Holt

Surface Emissions Monitoring

Conducted per 40 CFR 60.753

Reading Description: JH Initial _____ 10-Day _____ 30-Day

SEM Background Report

DATE: 9/7/2017

SITE: **Cottonwood Landfill**

TECHNICIAN: Jenny Holt-Weaver Consultants Group

S/N: 15868660

MAKE/MODEL: TVA 1000

CALIBRATION GAS STANDARD: 500 ppm

BACKGROUND UPWIND

(Highest reading in 30 seconds)

Location/Wind Direction: SE of Cell 4mph SW

Reading: 1.2 PPM

BACKGROUND DOWNWIND

(Highest reading in 30 seconds)

Location/Wind Direction: NW Flare of 4mph SW

Reading: 0.97 PPM

Background average 1.08 ppm

Jenny Holt

Surface Emissions Monitoring

Conducted per 40 CFR 60.753

Reading Description: Initial _____ 10-Day _____ 30-Day

SEM Exceedance Log

DATE: 9/7/2017

SITE: Cottonwood Landfill

TECHNICIAN: Jenny Holt-Weaver Consultants Group

S/N: 15868660

MAKE/MODEL: TVA 1000

**Attach monitoring map with numbered locations of exceedances

Exceedance Identifier	Location/Area and Time	Conc. of Exceedance (ppm)
1	NONE	
2		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		

Jenny Holt

3RD QUARTER SEM MONITORING
COTTONWOOD HILLS RDF
Weaver Consultants Group
WASTE MANAGEMENT
SHEET 1 OF 1
EXISTING CONTOURS SHOWN FROM AERIAL SURVEY FLOWN BY SUNDET ON JANUARY 21, 2017
COORDINATE SYSTEM USED TO DISPLAY DATA IS NAD83-ILLINOIS WEST COORDINATE SYSTEM IS FOR DISPLAY PURPOSES ONLY